

Google Earth Education



LESSON TITLE: Habitat and Adaptation

TIME [175 minutes]

OVERVIEW:

Students will explore voyager stories <u>Basic Landforms</u> and <u>Habitats</u>. Then they will go through the Google earth story <u>Habitat and Adaptation</u> to know about some animals and plants adapting to their habitats.

SUBJECT/TOPIC Science, Adaptation	AGE LEVEL 10-11 years
Learning Objectives	Inquiry
Students will know about biotic and abiotic factors of habitats and adaptation therein by organisms.	Why and how organisms adapt to their surroundings ?

Materials Needed

INTERNET connection Access to Google Earth Text Book Enquiry table Crossword puzzles

Lesson Summary

- **Engage:** Show them some landforms and habitats so that the children understand that physical conditions vary at different places.
- Explore: Students to find more about climate and organisms at different places using INTERNET and their textbook.
- Explain: A correlation will be drawn between components of a habitat and characteristics of organisms.
- Revise: Recording findings in <u>Enquiry Table</u> and filling the plant <u>crossword puzzle</u> and <u>animal crossword puzzle</u>
- Apply: Compile the knowledge so gathered in a Habitat Album and keep in the science lab for others" reference, or else create a google story.

Sustainable Development Goals





Culminating Task/Assessment

Students should be able to appreciate how climate change can influence the survival of organisms. They should be able to convey the same to others with the help of a google story and/or a habitat album.

Textbook Chapter

Class - VI , Science, L-9 Living Organisms and Their Surroundings (NCERT)

Engage (5 minutes)

- 1. Talking to students about the plants and animals they know of in their own surroundings.
- 2. About a number of organisms housed on their own body and in their own homes.
- 3. About threats to life of organisms and how they survive.

Explore (20 minutes)

- 1. Explore voyager stories <u>Basic Landforms</u> and <u>Habitats</u>.
- 2. Students will record the information about climatic conditions, flora and fauna they could gather in the Enquiry Table
 - 3. Raise the basic question : Why those organisms in those habitats?

Explain (20 minutes)

- 1. Teacher organizes students into small groups or partners.
- 2. Students share their knowledge about biotic and abiotic components of a habitat with a small group or a partner.
- 3. Teacher facilitates whole class discussion by raising probing questions.

Revise (10 minutes)

Ouestionnaire:

- 1. Name the different habitats. Name two animals and two plants found in each habitat.
- 2. What are aquatic and terrestrial habitats?
- 3. Which things are in excess and which are scarce in a desert and in water?
- 4. Think how abiotic factors influence the biotic component of a habitat?
- 5. Describe the climatic conditions found in mountains.

Next, repeat the process with a second source of information.

Explore (20 minutes)

- 1. Go through the Google Earth story Habitat and Adaptation.
- 2. Find the adaptive features in plants and animals in various habitats.
- 3. Watch the video on plants <u>adaptation to cold</u>. Note down the special features they have.
- 4. Explore about <u>camouflage</u> through voyager story
- 5. Find how the aquatic plants are adapted to live in water?

Explain (20 minutes)

- 1. Teachers organize students into small groups or partners.
- 2. Students share their ideas with each other and with the teacher. Teacher to facilitate class discussion by raising questions such as:
 - A. How are desert plants different from aquatic plants?
 - B. Why do polar bears have fur coats?
 - C. Why can't a fish survive in grassland?

Revise (10 minutes)

Students to think

- 1. Why do we find different types of flora and fauna in different habitats?
- 2. What will happen if organisms do not adapt to the environment?
- 3. How are organisms affected if habitats are disturbed by human intervention?
- 4. Fill the plant crossword puzzle and animal crossword puzzle

Apply (70 minutes)

- 1. Students prepare a habitat album with pictures of plants and animals found in different habitats.
- 2. Students create a google earth story to show human influence on natural ecosystems.
- 3. Carry out a campaign titled LET THEM BE, to protect natural surroundings of organisms.

Evaluate:				
•	Excellent(4)	Very Good(3)	Good(2)	Needs to Improve(1)
Content knowledge				
Presentation				
Participation				

Additional Resources

https://youtu.be/kqATiYJVckQ

https://expeditions.gle/fdl/BpdS

https://expeditions.gle/fdl/eKrQ

https://expeditions.gle/fdl/1fFN

Credits

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